

CLAIMS

What is claimed is:

- 1 1. An information management system, comprising:
2 a data repository adapted to store related data tied to a key parameter field;
3 and
4 at least one application server adapted to provide a plurality of applications
5 to a plurality of users, the at least one application server operatively coupled to the
6 data repository, each of the applications adapted to generate at least some data
7 having the key parameter field, the at least one application server adapted to
8 retrieve and update selected ones of the related data when ones of the applications
9 use and generate application data having the key parameter field.
- 1 2. The system as defined in claim 1, wherein the data repository is adapted to
2 store all data generated by each of the applications.
- 1 3. The system as defined in claim 1 wherein the data repository comprises a
2 plurality of databases each adapted to store data from a respective one of the
3 plurality of applications.
- 1 4. The system as defined in claim 1, wherein the related data are relevant to a
2 hydrocarbon-producing portfolio, and the plurality of applications comprises at
3 least two selected from the group of a geoscience application, a petroleum land
4 management application, a drilling engineering application, a finance application,
5 a reservoir engineering application, a sales and marketing application, and a field
6 operations application.

1 5. The system as defined in claim 1, wherein the plurality of applications
2 comprises at least one selected from the group of a database management
3 application, a portfolio management application, and a portfolio forecast
4 application.

1 6. The system as defined in claim 5, wherein the related data are relevant to a
2 hydrocarbon-producing portfolio and the database management application
3 comprises a front-end user interface operatively coupled to the data repository and
4 adapted to generate at least some data having the key parameter field when ones of
5 the plurality of users enter data into the front-end user interface.

1 7. The system as defined in claim 6, wherein the front-end user interface
2 comprises a plurality of different application modules each directed to specific
3 ones of the plurality of users.

1 8. The system as defined in claim 5, wherein the portfolio management
2 application comprises a resources optimization program adapted to use the related
3 data retrieved from the data repository to generate an optimized allocation of
4 resources based on at least one selected criterion.

1 9. The system as defined in claim 8, wherein the selected criterion comprises
2 at least one selected from the group of developing most profitable assets first,
3 achieving a selected net cash flow, achieving a selected earnings, achieving a
4 selected level of production, satisfying obligations on time, and developing assets

5 to achieve the greatest net cash flow in a selected amount of time for a selected
6 amount of capital.

1 10. The system as defined in claim 8, wherein the applications server is adapted
2 to automatically update selected ones of the related data when the resource
3 optimization program generates optimized allocation of resources data.

1 11. The system as defined in claim 5, wherein the portfolio forecast application
2 is adapted to forecast future performance of assets based on the related data.

1 12. The system as defined in claim 1, further comprising a notification system
2 adapted to automatically notify at least one user when related data relevant to the
3 at least one user has been updated in the data repository.

1 13. The system as defined in claim 1, wherein the plurality of users comprise
2 members of an asset development team having different functions related to the
3 development and management of assets in the portfolio, each member responsible
4 for providing particular related data corresponding thereto.

1 14. The system as defined in claim 13, wherein the members of the asset
2 development team comprise at least two selected from a geoscientist, a landman, a
3 reservoir engineer, a regulatory compliance administrator, a drilling engineer, a
4 finance analyst, a field operator, a sales and marketing representative, and a
5 portfolio manager.

1 15. A management system for a hydrocarbon-producing portfolio, comprising:
2 at least one server adapted to serve a plurality of applications to respective
3 users, each of the applications adapted to generate data corresponding to the
4 respective user, at least some of the data generated by each application having a
5 key parameter field therein;
6 a database management system operatively coupled to the at least one
7 server and adapted to store at least some of the data generated by each application
8 and update any of the stored data having the key parameter field when ones of the
9 applications modify any of the stored data having the key parameter field; the at
10 least one server adapted to serve the updated data to any other ones of the
11 applications when the other ones of the applications retrieves the updated data
12 having the key parameter field; and
13 at least one business process model application adapted to apply a business
14 process model to selected ones of the stored data to generate modeled data having
15 the key parameter field, the at least one business process model application
16 adapted to automatically update the modeled data when any ones of the selected
17 ones of the stored data are updated by operation of any of the other applications.

1 16. The system according to claim 15, wherein the business process model
2 comprises creating an optimized drilling schedule.

1 17. The system according to claim 15, wherein the business process model
2 comprises forecasting hydrocarbon production for a selected drilling schedule.

1 18. The system according to claim 15, wherein the plurality of respective users
2 comprises at least two selected from geoscientists, landmen, reservoir engineers,
3 regulatory compliance administrators, drilling engineers, finance analysts, field
4 operators, sales and marketing representatives, and portfolio managers.

1 19. The system according to claim 15, wherein the plurality of applications
2 comprises a part of the database management system.

1 20. The system according to claim 19, wherein the plurality of applications
2 comprises application modules embedded in the database management system.

1 21. A method for managing information, comprising:
2 serving a plurality of applications to respective users, each of the
3 applications generating data corresponding thereto, at least some of the data
4 generated having a key parameter field therein;
5 storing the data generated by each application;
6 updating any of the data having the key parameter field when ones of the
7 applications is used to modify any of the stored data having the key parameter
8 field; and
9 serving the updated data to any other ones of the applications when said
10 other ones of the applications retrieves from storage the data having the key
11 parameter field.

1 22. The method as defined in claim 21, wherein the plurality of applications
2 comprises a plurality of separate applications each directed to at least one of the
3 respective users.

1 23. The method as defined in claim 21, wherein the serving the plurality of
2 applications comprises serving a parent application comprising a plurality of
3 application modules, each of the application modules directed to at least one of the
4 respective users.

1 24. The method as defined in claim 21, wherein the plurality of applications
2 comprises at least one selected from a geoscience application, a petroleum land
3 management application, a drilling engineering application, a finance application,
4 and a reservoir engineering application, a production forecast application, and a
5 portfolio optimization application.

1 25. The method as defined in claim 21, further comprising:
2 applying at least one business process model to selected ones of the stored
3 data to generate modeled data, and
4 automatically updating the modeled data when selected ones of the stored
5 data are updated by operation of any one of the served applications.

1 26. The system according to claim 25, wherein applying the business process
2 model comprises creating an optimized drilling schedule based on a selected
3 criterion.

1 27. The system according to claim 25, wherein applying the business process
2 model comprises forecasting hydrocarbon production for a selected drilling
3 schedule.

1 28. A method for managing a hydrocarbon-producing portfolio, comprising:
2 having a plurality of asset team members each using an application related
3 to the function of the respective asset team member to generate data relevant
4 thereto; the asset team members comprising at least two selected from a
5 geoscientist, a landman, a reservoir engineer, a regulatory compliance
6 administrator, a right-of-way administrator, a drilling engineer, a completion
7 engineer, a finance analyst, a field operator, a sales and marketing representative,
8 and a portfolio manager; and
9 automatically updating corresponding data used by any other one of the
10 applications based on the data generated by using at least one of the applications.

1 29. The method of claim 28, wherein the applications comprise at least two
2 selected from a seismic interpretation application, a production forecasting
3 application, a petroleum land management application, a regulatory compliance
4 application, a drilling engineering application, and a portfolio optimization
5 application.

1 30. The method of claim 28, further comprising:
2 applying at least one business process model to select ones of the
3 corresponding data to generate modeled data.

1 31. The method according to claim 30, wherein the applying at least one
2 business process model comprises determining an optimized drilling schedule.

1 32. The method according to claim 31, wherein the optimized drilling schedule
2 is determined based on at least one selected from product price forecasts and
3 production predictions.

1 33. The method according to claim 32, wherein the optimized drilling schedule
2 is determined based on a selected criterion comprises at least one selected from
3 developing most profitable assets first, achieving a selected net cash flow,
4 achieving a selected earnings, achieving a selected level of production, satisfying
5 obligations on time, and developing assets to achieve the greatest net cash flow in
6 a selected amount of time for a selected amount of capital.

1 34. The method according to claim 30, wherein the applying at least one
2 business process model comprises forecasting hydrocarbon production.

1 35. The method according to claim 30, wherein the applying at least one
2 business process model comprises automatically populating regulatory forms
3 based on corresponding data.

1 36. The method according to claim 30, wherein the applying at least one
2 business process model comprises determining drilling costs associated with at
3 least one prospectively drilled well.

1 37. The method according to claim 28, wherein the hydrocarbon-producing
2 portfolio comprises existing and prospective well locations, petroleum land
3 management information related to the existing and an prospective well locations,
4 capital equipment disposed in the existing wells, capital equipment proposed for
5 existing and prospective wells, and estimated hydrocarbon reserves in reservoirs
6 penetrated by the existing and prospective wells.

1 38. The method according to claim 28, further comprising notifying at least one
2 of the asset team members that corresponding data used by the one of the
3 applications used by the at least one asset team member have been updated by
4 operation of the other one of the applications used by at least one other asset team
5 member.

1 39. The method according to claim 28, further comprising limiting any one of
2 the asset team members from updating selected ones of the corresponding data
3 outside of the function of the any one of the asset team members.

1 40. The method according to claim 28, further comprising restricting selected
2 ones of the asset team members from updating selected corresponding data prior to
3 other selected ones of the asset team members generating other selected
4 corresponding data.